

## COMPOSITION FOR IMPROVING SLEEP QUALITY AND EFFICIENCY, AND METHODS OF PREPARING AND USING THE COMPOSITION

### Abstract Of The Disclosure

A pharmaceutical composition comprising extracts of the root of a plant of the family Valerianaceae, and methods of using such composition and/or extracts of the root of a plant of the family Valerianaceae to improve sleep quality and sleep efficiency and to improve sleep structure and sleep architecture, are described. Sleep quality, sleep efficiency, sleep structure and sleep architecture may be in the context of various criteria or parameters, as described herein. Specifically, a pharmaceutical composition that reduces wake after sleep onset, increases total sleep time, increases sleep efficiency, and/or increases sleep time spent in sleep stages three and four, in a normal adult is described, the composition comprising therapeutically effective amounts of valerenic acid and its derivatives, kessane derivatives, valeranone, valeranal, and amino acids. The composition may be prepared by the steps of (i) adding the roots to an alcoholic extraction solvent to form a mixture, wherein the alcoholic extraction solvent comprises between approximately 50% (v/v) to approximately 100% (v/v) ethanol in a remainder of water, and (ii) heating the mixture to a temperature of between approximately 70°C to approximately 80°C for a period of at least two hours; wherein valerenic acid is present in the extract, the content of valepotriates in the extract is substantially reduced with respect to its content in the root, and the content of valerenic acids in the extract is not substantially reduced with respect to its content in the root; and minimizing the yield of unstable valepotriates. The valerenic acid derivative, where present, is preferably selected from acetoxyvalerenic acid, hydroxyvalerenic acid, valeranal, valerenol.